

ABSTRACT

A method for minimizing the aggregation tendencies of an amyloid forming protein is provided comprising identifying a portion of the protein that is critical to amyloid formation; and inserting a peptide at the portion. The invention also provides a peptide for insertion in an intact human kappa-IV light chain variable domain, the peptide comprising the following amino acid sequence Phe₇₁-Thr₇₂-Leu₇₃-Thr₇₄-Ile₇₅-Ser₇₆-Ser₇₇ wherein the subscript numbers are the residue location points in the domain. A method for preventing amyloid formation in human kappa-IV light chain variable domain is also provided, the method comprising inserting the peptide Phe₇₁-Thr₇₂-Leu₇₃-Thr₇₄-Ile₇₅-Ser₇₆-Ser₇₇ into the domain, wherein the subscript numbers indicate the residue location on the domain.